

# The Development Of A Joint Operational Concept, “Effects Based Operations And Rapid Decisive Operations”

CSC 2001

## Subject Area Operations

This paper explores the parallel development of the joint operational concepts, Rapid Decisive Operations (RDO) and Effects-Based Operations (EBO), with the Marine Corps' emerging operational concept, Expeditionary Maneuver Warfare (EMW). It explores the role of operational concepts in providing future warfighting capabilities and seeks to answer the questions, how will a joint operational concept enhance future warfighting capability, and, how the Marine Corps can best contribute to the joint force of the future?

This paper is divided into six sections. Section I provides an overview of the future security environment in which the joint force of tomorrow will operate. "The Defense Department's Joint Strategy Review concluded that the 21<sup>st</sup> century security environment would be characterized by chaos, crisis, and conflict, caused by political ideology, ethnic and religious animosity, proliferation of weapons of mass destruction, and competition for scarce resources."<sup>1</sup> Section II explores the major developments in joint warfighting; the Defense Reorganization Act of 1986, better known as the Goldwater Nichols Act (GNA), JV2010/2020, and the evolution of United States Joint Forces Commands' (USJFC) role in developing joint operational concepts. Section III provides a framework for operational concepts and articulates the tenants of an operational concept. "Operational concepts are general descriptions of how military forces intend to fight in a future environment. Such concepts originate from innovative ideas about how to fight, as well as notions on how advances in technology might be applied to warfare."<sup>2</sup>

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<sup>1</sup>Richard A. Shultz, Jr., "Crises Response and Power Projection in Nonpermissive Environments and Conflicts", The Role Of Naval Forces in 21st Century Operations, Richard A. Shultz, Jr., and Robert L. Pfaltzgraff, Jr., ed. (Washington: Brassey's), Forward

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It argues the need for a joint operational concept that will be able to drive the combat development processes of the individual services. Without a joint operational concept, the intent of neither GNA nor the vision established in JV 2020 will be realized. Section IV examines the current RDO and EBO initiatives. It analyzes the USJFC RDO wargames, and the Joint Strike Force initiative. Section V analyzes the Marine Corps' corresponding efforts to develop its' new operational concept, EMW. As the Marine Corps continues to develop the operational concept EMW, it should focus on articulating how the Marine Corps plans to act as an enabling force for joint operations. Section VI provides the authors' conclusions and recommendations for the future development of operational concepts. Future operational concepts must focus on the needs of the regional CinCs and provide the NCA with the greatest future warfighting capability across the spectrum of conflict. USJFC must be given the authority commensurate with the responsibility that they have been given as DOD's lead agency for transformation. The individual services must overcome service parochialism and actively support USJFCOM in their attempts to develop an operational concept.

#### The Future Security Environment

The fall of the Soviet Union has ushered in a new era of political and military uncertainty. The currently unsettled nature of our policy, strategy, and doctrine after more than fifty years of certainty, brought about by containment, is the source of much angst in official and academic communities. The lack of a clearly defined threat, the rapid pace of changing technology, and the effects of globalization are creating a non-linear world to which our political and military establishments are having a hard time adapting.<sup>3</sup> Historically, our approaches to policy, strategy,

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<sup>2</sup>Paul K. Van Riper, "Operational Concepts in Context", (Unpublished, 2000) 1.

<sup>3</sup>Hart—Rudman Commission, "New World Coming-Overview Briefing: Phase I", The United States Commission on National Security /21st Century, (Washington D.C. 1999)

and doctrine have been focused on an identifiable enemy and a linear battlefield. The ongoing debates calling for a revolution in military affairs, Department of Defense' (DOD) focus on transformation, and the emerging focus on asymmetric threats are all attempts to categorize and simplify the chaotic nature of the future security environment that the U.S. will encounter.

In an ambiguous and uncertain world, the challenge that confronts the U.S. military is how to best prepare its forces to meet the challenges of shaping the international security environment, as well as execute missions throughout the spectrum of conflict.<sup>4</sup> Instability exacerbated by overpopulation, scarcity of resources, cultural and ideological frictions, as well as regional competitors will create challenges to U.S. interests. As the effects of globalization continue, these challenges may come in the form of economic, political, and ideological challenges. Without a near-term peer competitor, future challenges will most likely come from asymmetric threats. "The rise of nonstate actors is not the main crisis that we have to worry about. It is chaos. It contrasts sharply with the good old days of crises, where there were state actors and one could pick up the phone and talk to somebody."<sup>5</sup> The proliferation and commercial off-the-shelf availability of military technologies into the hands of state and non-state actors greatly enhances the risk to U.S. forces. Advances in information and missile technology will extend the battle space to the continental U.S., thereby increasing the risk of U.S. involvement abroad. In such an uncertain future, the one thing that seems inevitable is that the U.S. military will be called upon to meet these challenges.<sup>6</sup>

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<sup>4</sup>Hart—Rudman Commission, "New World Coming-Overview Briefing: Phase I", The United States Commission on National Security /21<sup>st</sup> Century. (Washington D.C. 1999)

<sup>5</sup>General Charles C. Krulak, "Ne Cras: Not Like Yesterday", The Role Of Naval Forces in 21<sup>st</sup>Century Operations Richard A. Shultz, Jr., and Robert L. Pfaltzgraff, Jr., ed. (Washington: Brassey's), Forward

<sup>6</sup>For a complete analysis of the future security environment read the 21st Century Security Reports (Hart Rudman Reports), the National Defense University's report on alternative futures. For a better understanding of the effects of Globalization, read Friedman's, The Lexus and the Olive Tree or Tolivers, War and Anti War. For those

Although the future security environment is uncertain, the U.S. faces less risk than during the era of the Cold War. It would be naive to think that the uncertainty we face today compares with the risk we faced during a period when our security strategy was based on "mutually assured destruction." This strategy threatened the existence of not only the U.S. and Soviet Union, but also the world, as we know it. During the Cold War era our security strategy was based on the threat of nuclear holocaust. Limited conflicts, such as Korea and Vietnam, were fought on the periphery of Soviet and U.S. interests to avoid direct confrontation between the two super powers. According to Andrew Krepinevich, "The strategic environment in which the United States finds itself today is far more favorable than that which existed during the Cold War. It could be argued that, irrespective of what course the Defense Department follows in modernizing its forces, U.S. military superiority over any prospective near-term challenger is so great that we are unlikely to confront a significant threat to our vital interests over the next ten years, and perhaps longer."<sup>7</sup>

Although we face less risk to our existence as a super power, the operational risk of the military will be greater than ever. The reason this view is important to this paper is that without a realistic view of the future, the military will develop an operational concept that is not relevant to future threats. Uncertainty itself will demand a robust capability to operate along the entire spectrum without inflating the nature of risk in the future security environment.

Throughout the 21<sup>st</sup> century, the U.S. will be directly involved in protecting the human rights of others. This involvement will occur as a result of the effects of globalization in situations that have limited direct bearing on U.S. national interests; the risk to our Armed Forces will be great.

The military faces the risk of failure in situations where the outcomes are not based on military

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with Secret access who want the DOD's view on the future security environment read the Joint Strategy Review (Fall 2000).

victory. In his book, The Principals of War for the Information Age, Robert Leonhard contends that, "the U.S. Armed Forces will have a hard time adjusting to the political realities and constraints of war in the 21st century. It has already become a reality that the aim of military action is no longer the destruction of the enemies' military forces."<sup>8</sup> According to Lt. Gen (RET) P.K. Van Riper, "Future conflicts are likely to involve not only the military, but also other government agencies, intergovernmental and international organizations, and nongovernmental and private volunteer organizations. It is possible that in some coming contingencies the geographic combatant commander may not be the lead as the armed forces play a supporting role to other agencies or organizations."<sup>9</sup> The future security environment calls for a military that can operate decisively across the entire spectrum of conflict.

To meet the security challenges of the future, the U.S. Armed Forces must be able to operate as a single Joint Force. Despite considerable progress in joint warfighting over the past two decades, there is still no joint operational concept to drive the services to achieve the intent of the GNA. Furthermore, the vision of full spectrum dominance as set forth in Joint Vision 2020 (JV 2020) cannot be realized without a true joint operational concept that provides direction and guidance to the individual services. "Unlike anytime before, defense is virtually being inundated with technologies, all vying for attention and funds. By describing in some detail how forces are to be deployed, employed, and sustained, a joint operational concept forms the basis for developing future warfighting capabilities."<sup>10</sup> All of the services use a similar concepts-based combat development process that drives Doctrine, Organization, Training, Manpower,

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<sup>7</sup>Andrew Krepinovich, "Emerging Threats, Revolutionary Capabilities and Military Transformation" (Testimony before the Senate Armed Services Subcommittee on Emerging Threat, Washington D.C., March 5, 1999)

<sup>8</sup>Robert R. Leonhard, The Principals of War in the Information Age (California: Presidio, 1998)

<sup>9</sup>Paul K. Van Riper, "Operational Concepts in Context", (Unpublished 2000) 6

<sup>10</sup>Dr Jacques S. Gansler, "Changing Defense", Armed Forces Journal Oct 1999, 20

Leadership development, Personnel, and Financial expenditures (DOTMLPF).<sup>11</sup> Yet, each of the services currently has its own operational concepts that drive the combat development process. Without a joint operational concept to drive DOTMLPF development and decision-making toward a cohesive joint force capability, neither the intent of GWN nor the vision of Full Spectrum Dominance will be achieved.

### **The road to a Joint Operational Concept**

A review of the GNA, the impact of Joint Vision 2010/2020, and the development of USJFC's mission to develop a joint operational concept, provides the reader with a historical context from which to analyze the need for a joint operational concept.

### **Congress mandates jointness through legislation**

The intent of the GNA was to improve the performance of the Armed Forces by synergizing the effects of joint operations while reducing the cost of redundant capabilities. This new kind of jointness requires centralization and integration of organizations, doctrines and command.<sup>12</sup> The aim was to coordinate the combat capabilities of the services and allies or coalition partners to achieve the greatest possible military advantage.<sup>13</sup> This was to be accomplished through the creation and execution of plans, which maximized the unique capabilities of each of the services. The result was to be synergistic forces of significantly greater joint combat power than if each service had been employed individually against the same enemy.

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<sup>11</sup>The Marine Corps is currently the only Service that does not follow joint doctrine of DOTMLPF. The Marine Corps currently uses Doctrine Organization Training and Education, Equipment, and Supporting establishments (DOTES) to organize their CDP. The Marine Corps has emulated the JROC process by creating the MROC process.

<sup>12</sup> Peter J. Roman and David W. Tar, "The Joint Chiefs of Staff: From service Parochialism to Jointness", Political Science Quarterly: New York; Spring 1998, 91

<sup>13</sup>Chairman of the Joint Chiefs of Staff, JP 1. Joint Warfighting (Washington D.C., 1999)

The law revised and clarified the DOD's operational chain of command and the Joint Chiefs of Staffs' functions and responsibilities to provide for a more efficient use of defense resources.<sup>14</sup> The law redefined the roles of the Chairman of the Joint Chiefs of Staff (CJCS), the Service Chiefs, and the CinCs. The role of the Chairman was elevated to that of advisor to the National Command Authority (NCA), with the Joint Staff working directly for the Chairman. The role of the Service Chiefs became more subordinate to that of the Chairman, because he no longer needed consensus from the Service Chiefs in providing advice to the NCA. The Geographic CinCs were given areas of responsibility with a direct link to the NCA. GNA was a mandate from Congress for the services to eliminate redundant capabilities and improve joint warfare capabilities.

It is important to note that the individual services maintained the responsibility for training and equipping the forces. This meant that the services still controlled the acquisition and budgeting processes. GNA did not give the Chairman the power to modify the services' Program Objective Memorandum (POM); however, he can recommend changes to the Secretary of Defense.

Prior to 1986, no single individual or agency had overall responsibility for joint doctrine. As a result, there was no established process for the identification of critical joint doctrine voids, or procedures for participation by the combatant commands in the development of joint doctrine. Also, no single agency was responsible for ensuring consistency between existing joint doctrine, service doctrine, and multi-service doctrine and combined doctrine. The GNA made the CJCS singularly responsible for “developing doctrine for the joint employment of the Armed Forces.” In turn, this 1986 law generated directives that amplified these new joint doctrine responsibilities given to the Chairman.

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<sup>14</sup> Chiarelli, Peter W. Beyond Goldwater Nichols, Joint Forces Quarterly, Autumn 1993, 71



## **Genesis for change**

The Gulf War proved that GNA had improved the responsiveness of DOD in meeting the needs of the NCA. The opening nights destruction of Iraq's integrated air defense system highlighted this fact. From the opening shots fired by Army attack helicopters, to the close cooperation of Navy, Marine, and Air Force jammers to mislead Iraqi radar operators, the air capabilities of the four services were closely integrated to achieve synergistic effects. The challenge that now presents itself to American military leaders is how to make the ad hoc nature of the preparations of Desert Shield integral to the "American Way of War."<sup>15</sup> Despite the success of the military as a whole and the remarkable performance of the separate services, the intent of GNA to produce a joint force had not materialized. An examination of the operational concept used during the Gulf War showed a lack of the services' ability to operate together to achieve the synergistic effects desired in GNA.<sup>16</sup> Cases of fratricide and the inability to coordinate the timing of the ground offensive are the best examples of the shortfalls that still remained.

## **JV 2010/2020 provides a vision for the development of a Joint Force.**

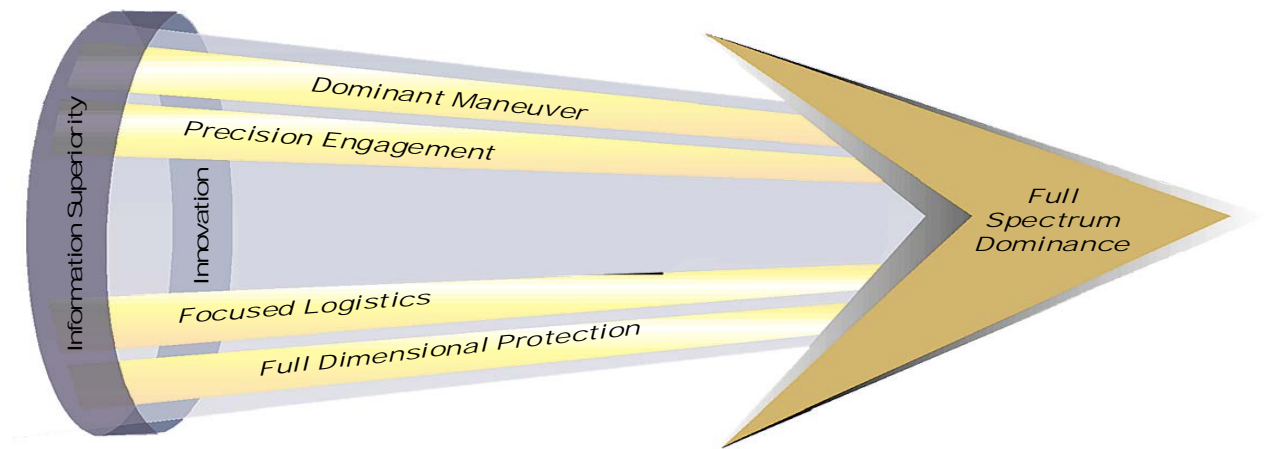
As a result of the lessons learned from the Gulf War and in a continuing effort to improve joint warfighting capabilities, the Chairman published Joint Vision 2010 to provide guidance for the future joint force. The vision expressed a desired capability for Full Spectrum Dominance through the attainment of dominant maneuver, precision engagement, focused logistics, and full dimensional protection.<sup>17</sup>

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<sup>15</sup>Future Joint Force Working Group. "Future Joint Force", (Institute for Defense Analysis: 2000), 6.

<sup>16</sup>Chiarelli, Peter W. Beyond Goldwater Nichols. Joint Forces Quarterly, Autumn 1993, 76

<sup>17</sup>JV 2010/2020



The capability sets of JV 2010 have carried over to JV 2020. JV 2020 went further in identifying information as a domain with the new functional areas of information operations and space operations. The impact of information and information technologies on war is still uncertain. As a result, policy-makers and strategists are confronted with a series of critical issues, including whether - and to what extent- information technologies represent simply an additional means to achieve strategic objectives, or actually spur the creation of new missions.<sup>18</sup> Information technology, the key enabler to information superiority, was laid out as the critical enabler to attain information superiority.

JV 2020 articulated a vision for the future capabilities of a joint force, yet the means and methods for achieving this vision have yet to be articulated. Without a way to match means, "operational capabilities", with ends, "Joint Force", the vision remains superfluous. In order to take the next step in establishing a joint force the CJCS established an organization that would be given the overall responsibility of transforming the current force into a force capable of meeting the vision of JV 2020.

### **USJFC gets the mission to develop a Joint Operational Concept**

The key to developing a force capable of Full Spectrum Dominance is to develop a true Joint Operational Concept that establishes priorities and synergizes a proper balance in DOTMLPF development of the individual services and the joint force as a whole.

"Full Spectrum Dominance cannot be attained with a simple integration of the separate services, as they currently exist. To assume otherwise is naive and dangerous. It disregards the complex nature of warfare."

General A.C. Zinni  
USJFC RDO Conference March 2001

On 1 October 1999, in an effort to further joint warfighting capability and operationalize the vision set forth in JV 2020, USACOM was re-designated as USJFCOM. This redesignation emphasizes the expanded role USJFCOM assumes in transforming U.S. military forces to meet the security challenges of the 21<sup>st</sup> century.<sup>19</sup> The revised Unified Command Plan (UCP) delineates and assigns responsibility to U.S. Joint Forces Command for joint training, doctrine, experimentation, integration and interoperability. Of critical importance is USJFCOM's role in developing and championing joint requirements. USJFCOM was given the mission of joint concept development, joint experimentation, and joint training. USJFCOM was also given the responsibility as the joint deployment process owner for DOD, maintaining the capability of rapid and decisive military force power projection from the continental U.S.<sup>20</sup>

"As you know, the U.S. military divides the world into five geographic regions for command of forces and control of operations. The organization I run has command of essentially all general-purpose forces from all four services in the United States, both active and reserve. But instead of control of operations, since we have no Balkans, Persian Gulf or Korea, in our Area of Responsibility, our mission is to control the process to transform those forces into the military we will need in the future. At Joint Forces Command we like to say, "The future is in our AOR."<sup>21</sup>

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<sup>18</sup> Robert L. Pfaltzgraff, Jr., and Richard A. Shultz, Jr. .ed. War in the Information Age: New Challenges for U.S. Security. (Washington: Brassey's 1997), 9

<sup>19</sup>Admiral Gahmen, "Transformation," Armed Forces Journal Summer (2000)

<sup>20</sup>Admiral Gahmen, "Transformation," Armed Forces Journal Summer (2000)

<sup>21</sup>Admiral Gahmen, "Transformation," Armed Forces Journal Summer (2000) 77

## Developing a Joint Operational Concept

Newly formed and having inherited the mission of developing a joint operational concept, USJEC faces the challenge of developing a joint operational concept that will transform today's force, a force built on four separate service concepts, into a force that can meet the vision set forth in JV 2020. The goal of JFCOM is a broad and unconstrained exploration of concepts and technologies that will provide empirical data to support decisions.<sup>22</sup> According to General A.C. Zinni, "JFCOM must not only address CinC requirements, it must grasp service requirements and harmonize them. I do think that when a program has joint applications we must ensure that interoperability is taken into account."<sup>23</sup> The original definition of a joint force, as stated in GNA, is much closer to the desired end-state of JV 2020 than is the current joint doctrine. The validity of this definition stems from the fact that it addresses capabilities without regard to service parochialism.

Matters relating to the integrated employment of land, sea and air force, including matters relating to national military strategy, strategic contingency planning, and command and control of combat operations<sup>24</sup>

Current joint doctrine definitions of a joint force are not especially applicable to describe how we will fight in the future.

Joint "Connotes activities, operations, organizations, etc., in which elements of two or more military departments participate."<sup>25</sup> JP 1-02

Joint Force "A general term applied to a force composed of significant elements, assigned or attached, of two or more military departments, operating under a single Joint Force commander." JP 1-02

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<sup>22</sup> IBID 77

<sup>23</sup> A.C. Zinni "Challenges in the Central Region," Joint Force Quarterly, (Spring 2000): 27.

<sup>24</sup> Peter W. Chiarelli, "Beyond Goldwater Nichols", Joint Forces Quarterly, (Autumn 1993): 71

<sup>25</sup> Chairman of The Joint Chiefs of Staff, JP 1 02 Joint Terminology (Washington D.C.1998)

These definitions are antiquated and highlight the lack of focus on the operational capabilities of a joint force. A more suitable definition would be, using the right combination of capabilities -the right force at the right place and time. It will be up to USJEC to not only ensure the separate services fall in-line with evolving joint doctrine, but that the operational concept for the joint force of the future will provide the military capabilities established in JV 2010/2020.

The first section of this paper explored the major developments in joint warfighting. Through legislation, the GNA provided the mandate for the military to be able to fight as a joint force in order to synergize the capabilities of the individual services and meet the fiscal constraints of a nation during a time of relative peace. N 2010/2020 was then reviewed to provide a vision for the capabilities desired in the future force. Finally, the role of USJFC was discussed to understand how they inherited the responsibility for joint doctrine, experimentation, and concept development. The next section of this paper defines and provides a framework for an operational concept.

### **Framework for an Operational Concept**

This section will attempt to define and articulate the tenants of an operational concept. It examines the purpose of an operational concept and provides a framework based on the concept of Dr. Joseph Strange as he applied it to "War". An operational concept must address the warfighting functions, the combat development process, and its relevance to providing future warfighting capabilities. Included is an analysis of the changes in the political environment, technological, and security environments that will drive our future operational concepts. This section concludes with a historical example of an operational concept.

### **The Purpose of an Operational Concept**

An operational concept should do for future warfighting capabilities what doctrine does for current and near-term warfighting capabilities.

**Doctrine**—Fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative, but requires judgment in application.<sup>26</sup>

**Joint doctrine**—Fundamental principles that guide the employment of forces of two or more services in coordinated action toward a common objective. It will be promulgated by the Chairman of the Joint Chiefs of Staff, in coordination with the combatant commands, services, and Joint Staff.<sup>27</sup>

### Big C little c Concepts

In his book Capital "W" War. A Case For Strategic Principles of War, Dr. Joseph Strange articulates the fact that war has become so complex that in order to understand what we are talking about when we discuss war, there needs to be a contextual basis to keep our thoughts and discussions focused. (Hence big W small w war).<sup>28</sup> The term "war" itself has grown to have endless definitions and so it is with the term "operational concept". The term operational concept has no joint definition. The term concept (small c concept) is defined as a notion or statement of an idea expressing how something might be done or accomplished, that may lead to an accepted procedure.<sup>29</sup> This is a fitting definition for small c concept. In order to bring all of the small c concepts, "ideas", into warfighting capabilities the definition of a Concept (big C) must provide a basis for bringing all of the small c concepts together to equal future warfighting capabilities at the operational level of war. It is only through big C concepts that the full integration of small "c" concepts turns into operational capabilities. This paper will use the term

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<sup>26</sup> Chairman of The Joint Chiefs of Staff, JP 1 Joint Warfare of The Armed Forces of The United States (Washington D.C. 1995)

<sup>27</sup> Chairman of The Joint Chiefs of Staff, JP 1 Joint Warfare of The Armed Forces of The United States (Washington D.C. 1995)

<sup>28</sup> Dr. Joseph Strange, Capital "W" War. A Case For Strategic Principles of War, (Marine Corps University 1998)

<sup>29</sup> Chairman of The Joint Chiefs of Staff, JP 1 Joint Warfare of The Armed Forces of The United States (Washington D.C. 1995)

Concept, big C to mean the articulation, the ways and means, of deploying and employing desired future warfighting capabilities at the operational level of war.

**Operational level of war**--The level of war at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within theaters or areas of operations. Activities at this level link tactics and strategy by establishing operational objectives needed to accomplish the strategic objectives, sequencing events to achieve the operational objectives, initiating actions, and applying resources to bring about and sustain these events. These activities imply a broader dimension of time or space than do tactics; they ensure the logistic and administrative support of tactical forces, and provide the means by which tactical successes are exploited to achieve strategic objectives.<sup>30</sup>

If an operational concept is based on the countries desired warfighting capabilities, the operational concept must be relevant to the national military strategy that is derived from the national strategy. Herein lies the problem in which today's military finds itself In an attempt to prepare for the future, the military has attempted to create a road to an unknown destination. With the newly created JV 2020, each of the services are creating their own strategies, visions, warfighting philosophies and so-called operational concepts that are based solely on small c concepts, many of which focus on only a single warfighting function.

"Concepts that are conceived and written without regard to the context in which they will be applied may not be appropriate for the circumstances of the time. At a minimum, those writing operational concepts should take into account the fundamental nature of war. In addition, they should understand where the concepts apply on the spectrum of conflict, the types of operations they will affect and the physical domains and environments likely to be encountered. Finally they need to ensure that the basic functions of battle, especially fire and maneuver are considered in all operational concepts."<sup>31</sup>

LT GEN P.K. Van Riper

In the case of the United States Armed Forces, a Joint Operational Concept must ensure appropriate inter-operability and establish mission areas for each of the services. This will allow the services to establish priorities in resources and assets. An operational concept articulates the

<sup>30</sup>Chairman of The Joint Chiefs of Staff, JP 1 Joint Warfare of The Armed Forces of The United States (Washington D.C.1995)

<sup>31</sup> Paul K Van Riper, Operational Concepts in Context. (Unpublished Paper)

way a military force plans to fight at the operational level of war in a given timeframe against an identified enemy. A true operational concept must address all warfighting functions: Command and Control, Intelligence, Maneuver, Fires, Logistics, and Force Protection. The description of how the force will fight must be detailed enough to provide the necessary guidance to drive the combat development process and DOTMLPF initiatives of the individual services. The individual services develop capabilities (DOTMLPF) based on this guidance. An operational concept must address the interrelationships between the different services as they integrate into a joint force. Furthermore, a hierarchy of joint DOTMLPF needs to be developed to govern how the force as a whole will be deployed and employed.

During peacetime an operational concept must provide enough insight into the future warfighting capabilities that a country desires to possess at a specific time in the future. These desired capabilities must be in balance with what the nation is willing to spend in terms of resources applied. "Operational concepts without resources are just a hallucination."<sup>32</sup>

When a specific enemy cannot be identified, the operational concept must at least address the concept's applicability as it relates to the spectrum of conflict. Planners must articulate where the operational concept is expected to be relevant along the spectrum of conflict.<sup>33</sup> An operational concept that claims to cover the entire spectrum of conflict against all potential adversaries will be too vague to be of value as an operational concept.

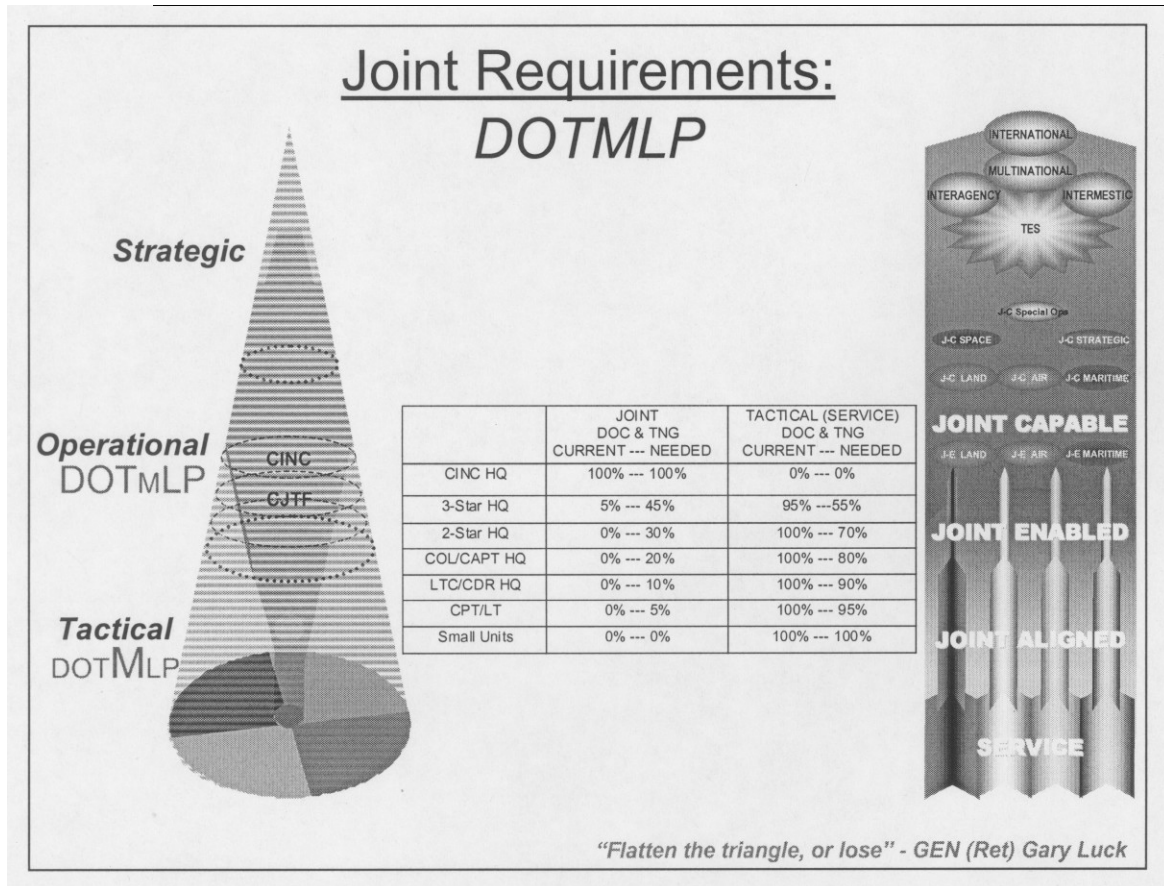
Changes in operational concepts usually occur as a result of changes in political environment, technology, or the security environment. The need for change usually comes from lessons learned in recent operations or from attempts to counter emerging threats. In his writings on the

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<sup>32</sup>United States Marine Corps, Command and Staff College Lecture dated 9 March 2001



effects of the current Revolution in Military Affairs (RMA), Michael J. Vickers argues war could be transformed in several ways: the boundaries among the dimensions of war, the levels of war, and the orientation of military operations could become substantially eroded.<sup>34</sup>



Before we can come to grips with future operational concepts it is important to put operational concepts into context. The question yet to be answered is where big C Concepts fit in the hierarchy of strategy, visions, and doctrine. The lines between strategy, roles, missions,

<sup>33</sup>One of the major reasons for EMW is that OMFTS was widely misunderstood to be a concept that was only applicable at the higher end of the spectrum and solely focused on amphibious operations. For a full understanding of OMFTS see United States Marine Corps, MCDP 3 Expeditionary Operations (Quantico, Va. 1999)

<sup>34</sup>Michael J. Vickers, "A Concept for Theater Warfare in 2020" in War in the Information Ape: New Challenges for U.S Security ed. Robert L. Pfaltzgraff, Jr., and Richard A. Shultz, Jr., (Washington: Brassey's 1997), 45

doctrine, and operational concepts have become blurred, as has the role of the military in relation to the other elements of national power.

### **Flattening the triangle**

As economic, financial, psychological, and political sectors of society become contested ground, traditional distinctions between military and economic security, or between domestic and foreign security, are blurred; U.S. information systems and infrastructures, such as the New York Stock Exchange or the Federal Reserve System, become potential targets of attack.<sup>35</sup> In future operations, military leaders will operate in an environment driven by political objectives that will effect tactical decisions. The strategic, operational, and tactical levels are likely to be compressed. Military actions once conducted at the tactical and operational level of war will increasingly have strategic effects. Technology has made it possible for commanders to see the battlefield at an unparalleled level in history. It has become technologically possible for commanders to see what the individual soldier sees on the battlefield in real-time. The implications on decision-making are unimaginable. Will commanders, at what we consider the operational level today, be picking individual targets for the soldiers of the future? If this seems radical, just think of the NSA's involvement with the selection and control of the targeting process during the Kosovo Campaign or President Johnson and Secretary of Defense MacNamara selecting targets during the Vietnam War.

Technology has also made it possible for the CNN effect to have a major impact on the actions of the individual soldier at what was once considered the tactical level. General Krulak articulated this in his concept of the strategic Corporal, "Success or failure will rest with the

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<sup>35</sup>Robert L. Pfaltzgraff, Jr. and Richard A Shultz, Jr., ed., War in the Information Me: New Challenges for U.S Security (Washington D.C.: Brassey's, 1997), 4.

rifleman and with his ability to make the right decision at the right time at the point of contact."<sup>36</sup> He described that the actions of the individual Marine will have significant impact on the strategic outcome of a crisis because CNN will be there to broadcast the Corporals actions to the world in real-time. The strategic Corporal must be able to transition from peacekeeping to peacemaking to high-intensity conflict all within a three-block radius. The world will be able to see the results of his decisions faster than it can be reported up the chain of command today. During the landing in Haiti, a Marine Lieutenant shot and killed a police officer that threatened his patrol with an automatic weapon. Within hours, NCA level officials wanted to talk directly to the Lieutenant. They were able to reach down and affect communications that went straight down to the individual without the chain of command even having knowledge of the requests. As future operations unfold on the battlefield, they will simultaneously unfold in living rooms across the world. Any future operational concept must take the CNN effect into consideration. The importance of risk management, casualty aversion, and the limiting of collateral damage will permeate military operations and continue to close the gap between the strategic and tactical levels of war.

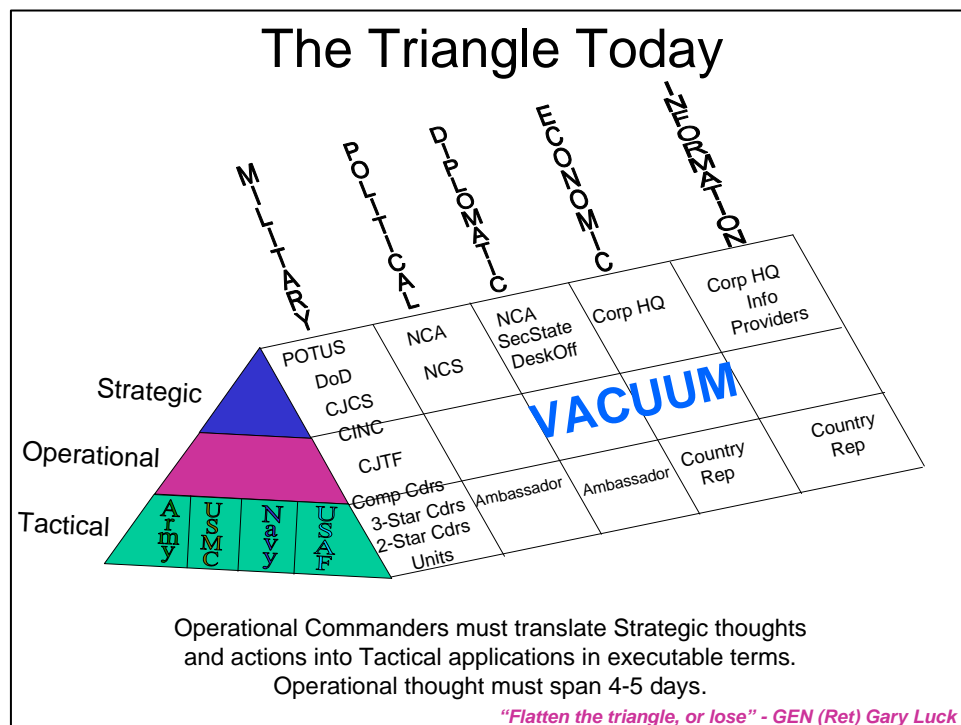
An operational concept should provide for the synergistic effects gained by integrating and applying all appropriate elements of national power: diplomatic, information, military, and economic into our operational concept. Information that heretofore would not regularly be accessible to the military will be critical to future operations. This requires routine and regular contact between the operational forces and other elements of the U.S. government at operational and tactical levels.

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<sup>36</sup> General Charles C. Krulak, "Strategic Corporal", Marine Corps Gazette, January 1999

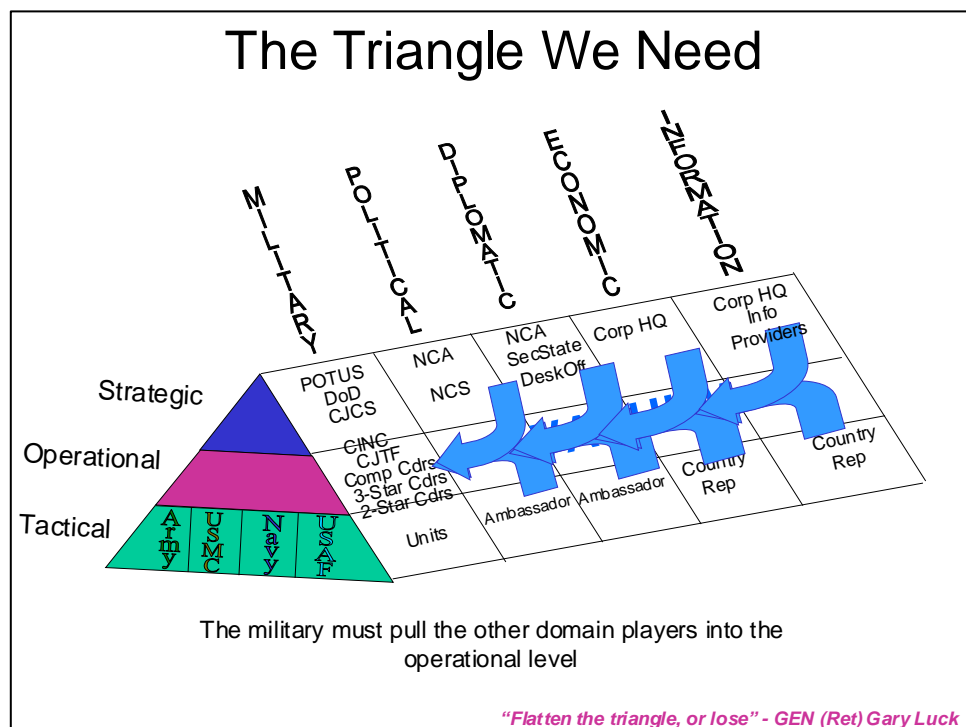
Military commanders plan and operate at all levels across the spectrum of military operations, but their planning is focused on a specific level and must be pushed down (or up) to be useful. Additionally, the other elements of national power (and other U.S. elements) typically focus on strategic plans & goals and tactical (country specific) issues. There is no "Ambassador" for the entire AOR for the CinC to coordinate with pre-crisis.

As we begin to flatten the triangle, bringing higher-level tactical commanders into the operational level (planning - training - doctrine) we must pull the other elements of the triangle into the operational level.



A joint operational concept must take into account this current void and include the integration of all the other agencies. "Presidential Decision Directive (PDD) 56, "Managing Complex Operations," mandates reform in the joint/interagency coordination process. It recognizes that the United States will continue to conduct complex contingency operations and

that greater coordination is required to appropriately bring all instruments of national power to bear on all such operations.”<sup>37</sup> Momentum is growing for what many are calling a GNA II, which will do for the interagency interoperability what GNA has done for joint interoperability. "I think reforms brought about under Goldwater-Nichols should be expanded to include the entire interagency community. The interagency process is antiquated — it is a difficult system that should be reshaped.”<sup>38</sup>



### A historical example of an Operational Concept.

A brief examination of the development of the Naval Concept, "From the Sea," provides a good historical example of how an operational concept drives future warfighting capabilities.

<sup>37</sup> William P. Hamblet and Jerry G. Kline, "Interagency Cooperation: PDD 56 and Complex Contingency Operations", Joint Force Quarterly, Spring 2000, 92.

<sup>38</sup> General A.C. Zinni "Challenges in the Central Region," Joint Force Quarterly. (Spring 2000): 31.

Following World War II it was clear that the Navy's focus was to protect sea lanes of communication, hence the focus on what has come to be called a blue water navy. Technological changes impacted the methodology of the Navy. With the advent of the airplane, the carrier replaced the battleship as the preeminent ship. The submarine changed the scope of the Navy's battlefield yet the Navy's focus remained the open seas. The end of the Cold War forced the Navy to rethink its role. The result was the document "From the Sea" which began the change of the naval forces focus to littoral warfare<sup>39</sup>. It argued that the problem facing the U.S. was one of "littoral warfare," warfare in the coastal areas of nations — particularly Eurasian nations. Moreover, it argued that rather than focus on confronting enemy fleets or protecting our own, the U.S. Navy should be concerned with projecting forces into the edges of Eurasia.

"From the Sea" implicitly argues that the central strategic challenges to the U.S. is two-fold:

- 1) To maintain the balance of power in Eurasia to assure that no Eurasian power could attempt to impose hegemony in the region or aspire to challenge the U.S. global domination.
- 2) To police the American Empire to assure that the peace of the new, military unipolar world is not disturbed by internal unrest or regional imperialist. A number of operations along this line have already taken place in the Persian Gulf, Liberia, Somalia, Haiti, and in a limited way, Bosnia. The point of all these peacekeeping missions is to assure that the order necessary for imperial prosperity is maintained.<sup>40</sup>

"From the Sea" was the vision or strategy from which the Operational Concept, Operational Maneuver from the Sea (OMFTS) was developed. OMFTS provided guidance from which the entire focus of the Navy and Marine Corps was driven. It led to the supporting concepts of Ship to Objective Maneuver (STOM), Sustained Operations Ashore (SOA), and Other Expeditionary Operations. The entire combat development process, DOTMLPF initiatives were driven by this

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<sup>39</sup>The concepts of Over the Horizon and Naval Expeditionary Operations preceded and were the bedrock of thinking that came to be "From the Sea."

<sup>40</sup> George and Meredith Friedman, Future of War (New York: St. Martin Griffin, 1996) 92-93

new operational concept. OMFTS led to the development and procurement efforts of the OMFTS Triad-the Advanced Amphibian Assault Vehicle, the Landing Craft Air Cushion, and the MV 22 Osprey.

Providing a framework for future operational concepts highlights the effects of changes in the political environment, changes in technology, and changes in the security environment that will drive our future operational concepts. The development of OMFTS provides an example of an operational concept and shows how an operational concept shapes future warfighting capabilities.

### **Joint Operational Concept Initiatives**

This section explores the ongoing initiatives to develop a joint operational concept. EBO and RDO are the concepts that are merging to articulate an operational Concept, "Big C", that will drive the development of future joint warfighting capability. An overview of EBO and RDO gives the reader a better understanding of the ongoing efforts to develop a joint operational concept. The analysis of EBO and RDO is based on the USJFC wargames held from January of 2000 through March of 2001.

### **Effects-Based Operations**

EBO is a developing concept that attempts to fully integrate all elements of national power. Born from the concept of effects-based targeting, this initiative will develop information management and decision support technologies to facilitate battle management beyond the first-level, attrition-based strategies that hinge on mass, force on force operational concepts.<sup>41</sup> Instead, this methodology seeks 2nd and higher-order effects and prompts commanders at all

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<sup>41</sup> Headquarters United States Air Force, AF Future Warfighting Concepts (Washington D.C. 2000), 2

levels to determine what effect will best achieve operational objectives.”<sup>42</sup> "Effects-based Operations"(EBO) is defined as using power and influence to create certain desired "outcomes" at the strategic, operational or tactical levels.<sup>43</sup> Effects-based operations attempt to break the coherence of the enemy's war-making and war-fighting capability by taking actions that disrupt or destroy the elements of his interdependent system of systems and the synergies that are the leverage points in the system." Determining how the synergies support the adversary's war-making capability and how much the adversary's decision-maker values them are critical considerations for EBO.

EBO focuses on achieving desired effects in order to attain strategic level objectives. Dynamic collaborative analysis of an adversary will identify vulnerabilities in the systems that provide their basis of power and cohesion. Operations that focus the full spectrum of national capabilities on those systems vulnerabilities will produce the synergy of effects necessary to change an adversary's behavior and provide a conclusion favorable to U.S. interests<sup>45</sup>.

**Effect:** The physical, functional or psychological outcome, event, or consequence that results from a specific military or non-military action at the tactical, operational, and strategic levels.<sup>46</sup>

**Effects-Based Operations:** Obtaining desired strategic outcomes, through the effects achieved by the application of the full-range of national capabilities at the strategic, operational and tactical levels.<sup>47</sup>

A key facet of EBO is that the desired effects are identified first, and then the appropriate instruments, military or otherwise, are applied to achieve the desired effect - physical destruction may still be a desired effect.

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<sup>42</sup> IBID

<sup>43</sup> United States Joint Forces Command, Rapid Decisive Operations Wargame, May 2000.

<sup>44</sup> IBID

<sup>45</sup> IBID

<sup>46</sup> United States Joint Forces Command, Rapid Decisive Operations Concept Paper (DRAFT) 2000, 6



## **Rapid Decisive Operation**

Rapid decisive operations' serves as an overarching integrating concept for the other joint initiatives.<sup>48</sup> A rapid decisive operation is a joint operation that achieves rapid outcome by destroying the coherence of the enemy's military capabilities through the synergistic and unpredictable application of joint capabilities that achieve a specific set of effects that operationally incapacitate the adversary by destroying his ability or will to fight.<sup>49</sup> It precludes his options, seizes the operational initiative, and generates in the enemy a sense of inevitability and helplessness that leads directly to concession on our terms.<sup>50</sup> The idea is to be able to alter conditions, build up forces, and conduct decisive operations simultaneously, before an adversary can employ asymmetric warfare.

The U.S. response needs to be rapid in application of non-military elements of national power early in the crisis, and rapid and decisive in the use of military power whenever the decision is made to use military force. The direct linkage of military action to political ends calls for the aggressive use of all aspects of coercive "power" early and continually throughout the campaign. This concept calls for a robust interagency capability that reaches down to the operational level if not the tactical level of war. Information Operations becomes a separate battlefield function with maneuver and fires subordinate.

According to the director of the RDO wargames, Navy Captain David Prothero, "The success of the experimentation effort will depend on the seamless application of power from ground, land, air and space."<sup>51</sup> He wants to see the services create "joint first products", "We don't want

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<sup>47</sup> IBID

<sup>48</sup> Admiral Gahmen, "Transformation," Armed Forces Journal Summer (2000) 78

<sup>49</sup> United States Joint Forces Command, "Rapid Decisive Operations Concept Paper", May 2000.

<sup>50</sup> United States Joint Forces Command, Rapid Decisive Operations Wargame, May 2000.

<sup>51</sup> Sandra I. Erwin, "Joint Service Wargames Aim To Shape Pentagon Programs," National Defense, May 2000.

each service to come up with their own concept of operations and have to latch them together with black boxes which results in sub-optimized capabilities,"<sup>52</sup> This view is contradictory to the traditional view that, the services' different warfighting concepts and distinct cultural identities can be matched to the right task and applied in creative combinations to create synergistic effects.<sup>53</sup>

## **RDO Initiatives**

This portion of the paper will review the ongoing initiatives to develop a joint operational concept under the umbrella of EBO and RDO. The Future Force Concept, the Joint Strike Force Concept, and the U.S. JECOM RDO Initiatives are all operational concepts that have contributed to the development of RDO and EBO. A brief review of each concept will be followed by the author's analysis of the concept.

### Future Force Concept

The Future Joint Forces Concept is a CJCS project to further define and articulate the capabilities described in JV 2020. Sponsored by the JCS J7 and the Joint Advanced Warfighting Program (JAWP), this project was an open discussion of the concepts that will allow future CinCs/CJTF Commanders to accomplish the vision set forth in JV 2020. This concept claims that to achieve Rapid, Decisive Operations with effects-based application of power comes the need to develop a more fully integrated, strategically and operationally agile Joint Force.<sup>54</sup> Information Operations becomes a separate battlespace function with maneuver and fires

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<sup>52</sup> IBID 35

<sup>53</sup> David W. Coffman, "Operational Art and the Human Dimension of Warfare," The Chairman of The Joint Chiefs of Staff Strategy Essay Competition, 83

<sup>54</sup> CJCS Future Force Working Group, "Future Forces Concept Paper", (Washington D.C. 2000) 1

subordinate. This concept established a series of principals to guide in the development of a future Joint Force.<sup>55</sup>

The concept calls for establishing a Standing JTF Headquarters element within the CinCs; independent of subordinate components and the establishment of an experimental JTF HQ's at USJFCOM. The experimental JTF Headquarters would be responsible for developing DOTMLPF requirements for the standing JTF headquarters. The CJCS would mandate interoperability amongst the services' C4 ISR capability and push for full implementation of PDD-56, interagency crisis action planning.

The Future Joint Forces Concept is the most realistic of all the emerging concepts. The fact that it is in the realm of what is fiscally possible may be its strongest attribute. It is by far the most complete operational concept. It meets the construct of an operational concept previously outlined in this paper. The concept addresses the changes that will be needed in DOTMLPF and the combat development process. This concept also addresses its applicability along the spectrum of conflict and is politically feasible.

#### Joint Strike Force Initiative

The Joint Strike Force (JSF) initiative was a series of war games sponsored by the Secretary of Defense and the Institute for Defense Analysis (IDA). The Joint Strike Force must be able to conduct rapid, decisive operations in an upper level, small-scale contingency mission.<sup>56</sup> It must be able to deploy within hours, and to sustain itself for the duration of the operation even in the absence of local supply bases.<sup>57</sup> Deploying directly into the Joint Operations Area, the JSF

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<sup>55</sup> IBID pg7

<sup>56</sup> Joint Advanced Warfighting Program, "Joint Strike Force Concept Paper", (Washington D.C. 2000) 1

<sup>57</sup> IBID

arrives with significant combat power (to include ground forces) within 24-96 hrs. The JSF conducts rapid, decisive operations against the enemy's capabilities and vulnerabilities.

The concept for the JSF is much like that of the Marine Corps' Marine Expeditionary Units — Special Operations Capable MEU (SOC) program. Forces would be allocated to the JSF for a dedicated joint training period followed by a certification process. The JSF would then act as a rapid response force. The Joint Strike Force effort would focus on the JSF Headquarters. This concept would eliminate the ad hoc nature of how the U.S. currently forms and deploys joint task forces. The JSF would be a national asset with its headquarters located in the Continental United States under the control of Joint Forces Command.<sup>58</sup> Tailored and based on the specific needs of the mission at hand, the exact size and composition of the JSF will be mission-dependent much like the Marine Corps' concept of the MAGTF.

Many of the ideas and changes to current force structure have been articulated in the past. The Marine Corps established an experimental Standing Joint Task Force in 1996. The JSF concept falls short in articulating how establishing a JSF will attain RDO. The force structure needed to execute this concept equates to about 60 percent of current force structure while the concept only addresses higher end small-scale contingencies.<sup>59</sup> This disproportional force requirement to capability does not reflect the realities of the future security environment. The lessons learned from the JSF wargames should be incorporated into the experimentation that will be conducted by USJFC in the upcoming millennium challenge series of wargames to be held in May 2001 and summer 2002.<sup>60</sup>

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<sup>58</sup> IBID 4

<sup>59</sup> Joint Advanced Warfighting Program, "Joint Strike Force Concept," (Brief to the Commandant of the Marine Corps, Washington D.C. August 2000)

<sup>60</sup> Charles Wilhelm, "Developing the Joint Force of the Future," (Speech given by former CinC South at the Marine Cows Association Ground Officer's Dinner; Washington D.C., April 2001)

## JECOM RDO Initiatives

Rapid Decisive Operations initiative is a USJFCOM Integrating Concept designed to meet requirements identified in JV 2010/2020. The concept focuses on the application of new technologies, capabilities, and DOTMLP changes that will allow for a joint military response to an upper level SSC within 96/120 hours. A baseline wargame (current U.S. capabilities based on current doctrine) and three futuristic candidates, A, B, C, were wargamed in a U.S. only scenario against a Kosovo-like enemy with robust 2012 capability. Key components common to all of the candidates were precision engagement, battle-space awareness, rapid joint force projection, battle-space shaping and joint command and control. Key enablers include a standing JTF Headquarters in each regional CinC, greatly improved C4 ISR capability, and full interagency integration. Each of the candidates was based on an operational concept that would produce a force capable of accomplishing RDO.

"The point in a crisis where we are most vulnerable is early on —that is when we are the least prepared today. It doesn't make sense to have an adhoc capability when we are the most vulnerable. CinC's know how to fight Divisions and Wings —it is early on when forces are being piecemealed into the crisis that we are most vulnerable. We need to have a Standing Joint Strike Force capability to even contemplate RDO." Gen. A.C. Zinni, RDO Wargame March 2001

Candidate A is a USJEC, J9, initiative with U.S. capabilities based on an integration of current service visions with capabilities that will be technologically feasible in 2012. Key enablers to this concept included the Marine Corps' MPF(F), High-Speed SeaLift, and perfect interoperability between the services and inter-agencies. The concept is based on the services having all of the small "c" concepts of today realized and integrated by 2020.

Candidate B is an Institute for Defense Analysis (IDA) initiative that totally reorganized and re-equipped the current force and established a single service type joint force trained and

equipped to fight as Joint Rapid Operation Forces (JROFs).<sup>61</sup> This concept called for a completely new command and control (C2) structure. The concept requires up to 1/3<sup>rd</sup> of today's force structure to be engaged in the training and execution phase of this concept. Enablers include major acquisitions of new technologies and equipment. JROF's would be formed into Joint Rapid Operations Groups (JROGs) and employed by a reorganized standing JTF HQs. JROGs consisted of 5,000 personnel with light (4-20 tons) armored vehicles, organic airlift and attack helicopter assets. JROGs would have different operational capabilities. Organized to be air-inserted or sea-based, there is no difference in training or equipment between the two versions except that the sea-based JROG has access to amphibious vehicles for amphibious operations. Each JROG was broken down into sixteen 309-man Joint Rapid Operations Elements (JROEs) for maneuver in support of precision fires for attacks to destroy C2/CSS nodes, disrupt lines of communication (LOC), or attack specific decisive points (centers of gravity — e.g., weapons of massed effects (WME). They did not decisively engage massed enemy forces. Lift requirements for the concept included fast deployment basing ships capable of 37-knots, ultra heavy airlift, (like the Lockheed-Martin Aerocraft blimp), and Super Short Take-off & Landing Aircraft (similar to Boeing Advanced Tactical Transport), and 64 Joint Tilt Rotor Aircraft per JROG.

Candidate C is a Defense Group Initiative (DGI) initiative based on the "Shock & Awe" concept.<sup>62</sup> It called for robust interagency/NCA integration to apply all aspects of national power in order to coerce an enemy to conform to U.S. will. Enablers include an aggressive NCA and near perfect situational understanding. Candidate C was based on the theory of precision (lethal & non-lethal) strikes in a highly visible manner to convince the enemy leader to change

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<sup>61</sup> John Williams, "Candidate B CONOPS," (Presented at the USJFC Wargames, Fort Monroe, Va. March 2000)

his behavior. Focused on achieving specific effects as recommended by a "JWAC-like" organization, the joint force applies military power with pre-emptive precision engagement, without any consideration for the application of ground forces until after the initiation of hostilities. The effects-based focus increased focus on the enemy.

The USJFCOM initiatives served as a great basis for intellectual thinking about future operational concepts. The candidates provided a wide variance of potential future capabilities. Unfortunately, the candidates were not fiscally feasible nor were they politically feasible. An operational concept based on the premise that, at will, the U.S. should preemptively strike our adversary is unrealistic. The positive outcome of the initiative was the evident need for a joint operational concept to drive the combat development processes of the services.

The next step in the development of a joint operational concept will be USJFCs' Millennium Challenge series. Millennium Challenge will be a series of wargames to further develop the operational concepts, small "c" that will be needed to develop a future operational concept, Big "C". The wargames scheduled for May 2001 and summer of 2002 will focus on integrating the envisioned future capabilities of the services into a standing Joint Task Force.<sup>63</sup>

### **Expeditionary Maneuver Warfare**

This section of the paper provides an analysis of the Marine Corps' emerging operational concept Expeditionary Maneuver Warfare. It focuses on the effects EMW will have on the combat development process, the warfighting functions, and the relationship between EMW and emerging joint operational concepts. This analysis is based on the FY 2000 Commandants

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<sup>62</sup> Peter Heatly, "Candidate C CONOPS," (Presented at the USJFC Wargames, Fort Monroe, Va. March 2000)

<sup>63</sup> Charles Wilhelm, "Developing the Joint Force of the Future," (Speech given by former CinC South at the Marine Corps Association Ground Officer's Dinner; Washington D.C., April 2001) also see Sandra I. Erwin, "Joint Service Wargames Aim To Shape Pentagon Programs," National Defense, May 2000.

Strategic Studies Group and the Marine Corps Combat Development Command's EMW Working Group.

The Marine Corps has been one of the most innovative military organizations in history; pioneering and developing giant evolutionary steps in the use of force such as Close Air Support, Amphibious Assaults, Heliborne Mobile Attacks, and most recently, Marine Air-Ground Task Force (MAGTF) operations. MAGTF operations include corps-level operations by a Marine Expeditionary Force (MEF), the maritime pre-positioning and amphibious capability of the Marine Expeditionary Brigade, and the battalion level operations of a Marine Expeditionary Unit (Special Operations Capable) (MEU (SOC)). EMW builds on the MAGTF concept as the ideal force to enable joint operations. As a force in readiness, the EMW concept calls for forward-deployed forces to conduct self-sustained, combined-arms operations as an enabler for the evolving joint operational concepts RDO and EBO.<sup>64</sup>

Based on the warfighting philosophy of maneuver warfare, EMW is the application of maneuver warfare doctrine to expeditionary operations across the spectrum of conflict for the 21st century.<sup>65</sup> The essence of EMW is to have the operational capability to take action to generate and exploit some kind of advantage over the enemy as a means of accomplishing our objectives as effectively as possible. That advantage may be psychological, technological or temporal as well as spatial. While the tenets of Maneuver Warfare remain valid, technological advances and new operational capabilities, such as sea-basing, will allow the MAGTF to enhance its operational capabilities providing the Marine Corps an even greater advantage for fighting in the future.

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<sup>64</sup> BGJN John Goodman, "EMW 21", (Presented at the Marine Corps 3 Star conference, Quantico, Virginia Oct 2000)



"Maneuver warfare is a warfighting philosophy that seeks to shatter the enemy's cohesion through a variety of rapid, focused and unexpected actions that create a turbulent and rapidly deteriorating situation with which the enemy cannot cope"<sup>66</sup> MCDP 1 WARFIGHTING

EMW needs to define the desired warfighting capabilities the Marine Corps will need to operate in the 2020 timeframe. It must focus the development of the future Marine Corps maritime expeditionary power projection capability across the spectrum of conflict. It must also provide the basis for determining requirements for new or modified DOTES/CDP innovations and ensure appropriate interoperability. To be of value, EMW must be descriptive enough to allow decision-makers to compare and contrast various alternatives to achieve desired warfighting capabilities.

As a capstone concept EMW provides the common focus and guidance for the Marine Corps operational concepts. EMW neither replaces nor renders any current Marine Corps concept obsolete. Rather, it expresses the convergence of current Marine Corps concepts into a single approach to provide a critical bridge to emerging joint operational concepts and the enabling role the Marine Corps will play in future operations. It describes multidimensional, scaleable, expeditionary, combined-arms MAGTFs and how they will operate. It provides the conceptual engine for the combat development processes that result in highly flexible naval expeditionary forces for use by our nation's Joint Force Commanders across the full spectrum of conflict well into the 21st century.<sup>67</sup>

The five currently approved Marine Corps operating concepts are OMFTS, Sustained Operations Ashore (SOA), Military Operations in Urban Terrain (MOUT), Ship to Objective

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<sup>65</sup> This definition comes from the first draft of the EMW paper written by the author of this paper while a member of the 2000 Strategic Studies Group.

<sup>66</sup> United States Marine Corps, Marine Corps Doctrinal Publication 1, (Washington D.C.)

Maneuver (STOM), and Other Expeditionary Operations.<sup>68</sup> These concepts articulate the desired capabilities for the Marine Corps to be able to operate along the entire spectrum of conflict. These concepts, together with EMW, determine the capabilities and requirements for the force of the future to become a reality. Requirements are somewhat enduring, whereas capabilities tend to change based on improvements in technology, modifications to the way the Marine Corps is organized, command relationships and information requirements.

As discussed earlier in this paper, requirements can be conceptually grouped under the six-warfighting functions: Command and control, maneuver, fires, intelligence, logistics (CSS) sustainment, and force protection. The critical link that enables future capabilities to satisfy the approved concepts are requirements. Capabilities are those platforms, systems, C4ISR technologies and task organizations, for example, that enable and empower a requirement to execute in a specific visionary environment. Under the historical example of OMFTS provided previously in this paper, the Advanced Amphibian Assault Vehicle (AAAV) and long-range communications systems are capabilities that are necessary to satisfy requirements that enable OMFTS to become a reality. As the concept EMW evolves it must do so in enough detail to allow decision-makers to compare alternative capabilities in a realistic and financially constrained environment.

The obstacles to the development of an EMW capable force are numerous. The parochial interests of traditionalists who would oppose these kinds of changes for the sake of tradition and conservatism are a threat to our relevance on the future battlefield. The Marine Corps needs to embrace its role as part of a joint force while at the same time make a strong effort to conserve

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<sup>67</sup>James Laswell, "Expeditionary Maneuver Warfare," (Marine Corps Warfighting Lab, Quantico, Virginia, 2000) Unpublished EMW Draft 6

current MAGTF capabilities and strengths that were learned through the painful experiences of past conflicts and contingencies. The willingness to change force structure will be a critical aspect to change. The Marine Corps needs a force that is organized, trained, and equipped for the chaotic battlefield of the future. The Marine Corps must choose what road it will travel and make the necessary structural changes to realize the potential of an EMW force able to meet the anticipated challenges of a future joint battlefield.

One of the current misperceptions is that OMETS is no longer a valid operational concept for the Marine Corps. Nothing can be, or should be, further from the truth. The basis of EMW is founded in the same warfighting philosophy that developed OMFTS. OMFTS is greatly misunderstood. Many perceived OMFTS to only address the higher end of the spectrum of conflict. The critical mistake in presenting OMFTS as a concept was not in the "vision", but rather taking that "vision" and associating it with the limited capabilities of the TRIAD within the concept of OMIFTS.<sup>69</sup> When specific equipment was tied to this concept, the capabilities of the equipment automatically restrict the "vision" of actually being able to execute OMFTS. Furthermore, OMFTS did little to address how the Marine Corps would integrate as part of a joint force while EMW identifies the fact that the MAGTF is the ideal force to enable joint operations and firmly subordinates Marine Corps DOTMLPF development to the needs of the future joint force.

EMW also articulates how the exponential growth in information and technological advance will affect future warfighting capabilities. The ability to acquire more real-time information at the small-unit level across the national spectrum of command and control has added more

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<sup>68</sup> United States Marine Corps, "Concepts & Issues 2000," (Marine Corps Combat Development Command Quantico, Va. 2000)

information stations and channels vice reduced them. Additionally, the corresponding insatiable desire to reduce fog, eliminate the lack of situational awareness, and effectively micro-manage as far down the tactical chain as possible has increased the requirements for identifying how the Marine Corps will operate as part of a joint/coalition force. The rapidity of decision-making and the ability to effect events far beyond traditional geographic boundaries has increased the commander and staffs warfighting horizons. Outlining the relationship between Marine Corps' vision, philosophy, operational concepts and doctrine lessens the chance for EMW to be misunderstood.

The pillars of EMW will guide the evolution of the EMW concept and provide a framework to drive the DOTES process. There has been much discussion on attaching metrics to each of the pillars of EMW. An example would be to set a 200-mile expectation on future amphibious operations or the ability to deploy a MEF anywhere in the world in 96-120 hours.<sup>70</sup> The usefulness of such metrics is totally dependent on the mission and circumstances at hand. It is much too early in the development of the concept to hastily establish such metrics. The following is a summary of the pillars of EMW:<sup>71</sup>

#### Enhanced Strategic Agility

Strategic agility means being able to move, employ, and sustain our military forces entirely on our own initiative and our own timing. The only diplomatically unconstrained force available

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<sup>69</sup>United States Marine Corps, "Concepts and Issues 2000," (Marine Corps Combat Development Command, Quantico, Va. 2000)

<sup>70</sup> The author believes this would be a political move to keep pace with the claim of the U.S. Army's Interim-Brigade Concept, which calls for the deployment of two Brigades in 96 hours and a Division within five days.

<sup>71</sup> United States Marine Corps, Expeditionary Maneuver Warfare (Marine Corps Combat Development Command, Quantico, Virginia) Draft 14

has often been, and will continue to be, a naval force operating forward from the sea.<sup>72</sup> Through forward-presence, MPF (F) and the LHA (X) the Marine Corps will continue to focus on being able to maneuver at the operational level. It will require the ability to marry forces and equipment at sea, as well as mitigate anti-access strategies while maintaining forward-presence capabilities and appropriate levels of forward-basing.

### Enhanced Operational Reach

Enhanced operational reach refers to expanding our current ability to project, support, and sustain Marine forces from expeditionary sites to objectives within a theater of operation. This requires the capacity to; detect, avoid, or defeat anti-access strategies; to provide combined arms expeditionary fires using all-weather target acquisition and engagement capabilities; to employ a single, integrated C4I capability; and, to provide indefinite sustainment from expeditionary logistics sites.<sup>73</sup>

Our future sea based logistics capability will allow the MAGTF to conduct operations that not only span the spectrum of conflict but, also have an inherent flexibility that allows the CSSE to be both responsive and timely in a fluid environment. A sea-based logistic capability will facilitate the operational tempo to allow future MAGTF commanders the ability to conduct operations with little or no operational pause. While the six functions of Marine Corps Combat Service Support (CSS) will be applicable in the future, sea-based logistics, as envisioned under EMW, requires new and innovative methods in the manner in which these functions will be executed.<sup>74</sup>

### Sea-basing under the EMW concept should:

- Replace the requirement for FBHLs and CSSAs as we currently know them. Operational pauses and large lodgments ashore are antithetical to the tenets of EMW.
- Reduce the vulnerability of CSS assets that an adversary can target.
- Provide a logistics capability that is more responsive, mobile, and efficient.
- Require a command and control architecture that facilitates information flow.

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<sup>72</sup> James O. Ellis, Jr., "Traditional Naval Roles", in, The Role Of Naval Forces in 21<sup>st</sup> Century Operations, Richard A. Shultz, Jr., and Robert L. Pfaltzgraff Jr., ed. (Washington: Brassey's) 143

<sup>73</sup> United States Marine Corps, Expeditionary Maneuver Warfare (Marine Corps Combat Development Command, Quantico, Virginia) Draft 14

<sup>74</sup> United States Marine Corps, Expeditionary Maneuver Warfare (Marine Corps Combat Development Command, Quantico, Virginia) Draft 14

#### MPF (F) capabilities under EMW include:

- Serve as the primary location of logistical application while incorporating a number of operational characteristics.
- Serve as a conduit for logistical application, provide maintenance support for an Amphibious Task Force (ATF), and serve as a distribution platform for the entire sea base and as holding/staging platform for both Marines and equipment.
- Include air and surface distribution interface points, launch and recovery capabilities, and configurable spaces that are multifunctional.
- Interoperable with the ATF

While logistical application from, and at sea, is a requirement, there remains the need to provide CSS functions ashore. A capable and mobile CSS element ashore is an integral part of the deployed MAGTF. Logistical trains ashore need to facilitate operations without hampering the operational tempo of maneuver forces. Shore-based logistical trains will receive supplies from the sea via a number of conveyances and provide supplies and services necessary to support forces ashore. With innovation the size of the logistical trains can be reduced significantly.

#### Enhanced Tactical Flexibility

Enhanced tactical flexibility is a function of tactical mobility, integration of combined-arms effects at the unit and sub-unit levels, and responsive and adaptable C2. More importantly, flexibility is directly linked to the ability to rapidly sequence from one mission profile to another, without needing to reorganize, reequip, or retrain. It requires the capability to maintain a common-tactical-picture and the ability to coordinate/control essential actions and activities to include adjacent units (joint allied, coalition, and interagency). The family of future fighting vehicles and changes in technology will reduce our dependency on fossil fuels, thereby giving the Marine Corps greater tactical agility.

#### Optimize Enablement, Support & Sustainment of Joint Multinational and Interagency Operations

The need to expand our ability to provide CinCs with responsive, scaleable, and sustainable expeditionary task forces that will enable a full-range of joint, multinational, and interagency operations. Adaptive C2 with 'Plug and Play' interface capability, interoperable planning and execution capabilities and integrated training will allow for seamless integration of joint/interagency operations. Through forward-presence and active-engagement with our allied and coalition partners, the Marine Corps will be actively engaged in shaping operations around the world. The Marine Corps' ability to rapidly project, support and sustain a viable force will play an integral role in protecting America's interests. As an enabling force to joint, allied and coalition operations the Marine Corps will maintain the ability to operate across the entire spectrum of crises/conflict.

One of the first initiatives in improving the Marine Corps' capability to operate with joint, allied and coalition forces is the reintroduction of Air Naval Gunfire Liaison Teams. The mission of these teams will be to act as liaisons for the integration of Marine Corps fires. The acquisition of the Global Command and Control System (GCCS) and the Global Combat Support System (GCSS) will enhance the Marine Corps' ability to integrate with the joint force of tomorrow. The GCSS provides information interoperability across combat support and command and control functions in support of the Joint Warfighter.<sup>75</sup> The addition of the Joint Task Force Enabler package, a robust command and control package has already been added to the Marine Expeditionary Units.

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<sup>75</sup> Chairman of the Joint Chiefs of Staff, Global Command Support System. (Director for Logistics, Washington D.C. 2000) 1.

## **EMW and the Warfighting Functions**

EMW should combine doctrine with technological advances in speed, mobility, fire support, communications, and navigation to seamlessly and rapidly identify and exploit enemy weaknesses across the entire conflict spectrum. EMW should focus on Naval Expeditionary Force (NEF) integration, interoperability of the Marine Corps as part of a joint force, and expand maritime maneuver across the spectrum of conflict. EMW will fundamentally change the way the Marine Corps structures, mans, equips and trains its force. The scope of this paper does not allow for a detailed analysis of these changes, but will touch on a few of the warfighting functions.

EMW will significantly change the conduct of C2. Information networks will have to support the need for RDO. A major decision must be made concerning the operational architecture of the future MAGTF Command Element. Operational architecture will, or at least should, drive the systems architecture because it has significant impact on the organizational makeup, manning, equipment requirements, employment, and information exchange requirements satisfied by the latter. Traditional SOA and crisis response operations will require a traditional architecture and resulting systems architecture. Operational architecture under the EMW concept, if carried to the maximum extent possible, will reflect flattened structures with communication and coordination efforts to multiple, widely-dispersed 'combat cells' which require networking capabilities.<sup>76</sup> Experiments conducted by the Marine Corps Warfighting Lab, under the Sea Dragon Series, and participation in USJFC Millennium Challenge 2000, highlighted the need for interoperability down to the tactical level.

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<sup>76</sup>United States Marine Corps, Expeditionary Maneuver Warfare (Marine Corps Combat Development Command, Quantico, Virginia: 2000) Draft 14



Command is promulgation of intent, but control will increasingly be viewed as the feedback and assessment that informs new intent. Centralized versus decentralized may be the wrong way to think about future joint C2. In a networked environment we can achieve the strengths of both — unity of effort with individual and distributed initiative driven by dynamic commander's intent. The most successful future commanders will be ones that can utilize the additional degrees of freedom that networking brings.<sup>77</sup> Future Joint Force Concept 2000

The challenge to projecting future systems architecture is the necessity for the Marine Corps system to be compatible and fully functional with future joint operational architecture. The key to being an enabler for joint operations is the need for the Marine Corps to develop capabilities that enhances the joint force. Due to the requirement for Corps Level Headquarters to be able to function as the core for a Joint Task Force, the MAGTF must be equipped with the C4ISR architecture to conduct immediate operations, joint and combined, at the MEF level. The challenge is to not adversely impact on the ability of MAGTF CE to command the MAGTF at the tactical level while integrating into the joint force at the operational level. The key is a MAGTF CE that can command both at the tactical level for the MAGTF and operate at the operational level as a JTF Enabler. This balance of operational and tactical C2 is a keystone in the realization of the Marine Corps EMW concept.

Many of EMW's effects on the warfighting function maneuver were discussed under the pillars of EMW. The increase in asymmetric threats makes the concept of movement and maneuver obsolete. In his book, The Principals of War for the Information Age, Robert Leonhard argues that "maneuver as a way of gaining positional advantage over the enemy is obsolete."<sup>78</sup> What Leonhard fails to realize is that the distinction between movement and maneuver is what is obsolete, movement being obsolete and maneuver becoming all

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<sup>77</sup> United States Marine Corps, Expeditionary Maneuver Warfare (Marine Corps Combat Development Command, Quantico, Virginia: 2000) Draft 14

<sup>78</sup> Robert R. Leonhard, The Principals of War in the Information Age (California: Presidio, 1998)

encompassing. Due to the unconventional warfare threats that will exist in the future the Marine Corps will no longer have the luxury of conducting simple movement of its forces. Maneuver will begin from the time forces assemble at home-stations and must be the mind-set for forward deployed forces. The USS Cole incident exemplifies this fact clearly.

Maneuver is the movement of forces in relation to the enemy to gain positional advantage. Effective maneuver keeps the enemy off balance and protects the force. It is used to preserve freedom of action, and to reduce vulnerability<sup>79</sup> FM 100-5

The key to fires under the EMW concept is that they will be fully integrated into the capabilities of the joint force. The Marine Corps will continue to focus on our combined arms capability. Air and naval surface fires will continue to be the Marine Corps focus on fires. It has become well known among all of the services that existing Navy Aegis destroyers and cruisers will play a key role in providing theater ballistic missile defense protection for U.S. forces overseas, particularly those moving ashore from coastal landing areas.<sup>80</sup> Increased range and lethality of weapons systems will allow for a greater advantage on the battlefield. The advanced expeditionary fire support system will be flexible, robust, and capable of providing responsive, all-weather fire support around the clock in all types of military operations and in a wide-range of tactical situations.<sup>81</sup> It will incorporate a wide array of precision and area weapons with improved range, accuracy, and lethality. A combination of precision guided munitions and accurately delivered non-precision munitions will provide an optimal mixture of engagement options.<sup>82</sup>

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<sup>79</sup>United States Army, Doctrinal publication 100-5 Operations. (Washington DC. 1993)

<sup>80</sup> Glen W Goodman, Jr., "Fires From The Sea", Armed Forces Journal April 2000, 46

<sup>81</sup>United States Marine Corp, Operational Concepts. Fires PDF (Marine Corps Combat Development Command, Quantico, Va. 2000)

<sup>82</sup>United States Marine Corp, Operational Concepts. Fires PDF (Marine Corps Combat Development Command, Quantico, Va. 2000)

The expeditionary force must have real-time capability to manage ensembles of both sensors and weapon systems including a means to deconflict weapon employment and the ability to call for specific weapons that match the target characteristics when it is needed.<sup>83</sup> The ability of digital systems will allow the massing of effects while keeping assets dispersed on the battlefield. Precision, low-volume fires will be used against high-payoff or particularly dangerous point targets, especially those that are hardened and difficult to destroy with area fires. Commanders must understand the impact of collateral damage on the future battlefield. With each new gun camera clip the public is reminded that America's Armed Forces possess an unparalleled ability to strike hostile targets discriminately anywhere in the world with impunity.<sup>84</sup> Employment of indirect fire may be severely restricted due to the possibility of unacceptable collateral damage. In less restrictive environments, the need for rapid response and effect on target will require reliable first-round fires for effect. Non-lethal fires will be used extensively for force protection and to limit noncombatant casualties.

Intelligence will play an increasing role as EMW emerges. According to the current Commandant of the Marine Corps, General James L. Jones, "In the future, intelligence will remain the indispensable precursor to operations. Recognizing this, we have been enhancing MAGTF intelligence capabilities for several years."<sup>85</sup> The Marine Corps has established a Director of Intelligence (DirInt) to be the advocate for Marine Corps Intelligence capabilities. The new DirInt, BGEN Michael Ennis, intends to achieve operational relevance by developing a

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<sup>83</sup> Defense Science Board, "Tactics and Technology for 21<sup>st</sup> Century Military Superiority", Office of the Secretary of Defense, (Washington D.C.: October 1996)III 5

<sup>84</sup> Michael P. Marletto, "The Impact of Emerging Munitions Technology on 21<sup>st</sup> Century Warfare", Marine Corps Gazette, January 2000, 27.

<sup>85</sup> Vernie R. Liebl, "The Intelligence Plan: An Update," Marine Corps Gazette, January 2001, 54

concept of intelligence support for EMW. His view is that any intelligence initiatives — whether systems, processes, or people — must be tied to operational concepts and initiatives.<sup>86</sup>

To meet the intelligence demands of EMW, the Marine Corps Intelligence Agency (MCIA) will have to focus on the ability to integrate with the joint and interagency intelligence communities at the operational level. In an interview with Mr. Dody Kuntz, Director for Current Operations Joint Warfare Analysis Center (JWAC), he expressed the need for the Marine Corps to be able to partner with the theater Joint Intelligence Centers (JICs), national level assets like JWAC, the Defense Intelligence Agency, and other interagency intelligence communities. He articulated the fact that the Marine Corps will have to make the commitment to training not only Intelligence Officers, but also, operators in the capabilities that are available for the Marine Corps to tap into in the future.<sup>87</sup>

EMW requires the intelligence function to shift from telling the Commander what the enemy has done - to what the enemy will do. Predictive analysis and nodal analysis will emerge as key capabilities in the Marine Corps' capability to do effects-based operations.

### **EMW as a bridge to evolving Joint Operational Contents**

EMW will be the Marine Corps' link to the joint concepts that will drive the development of joint warfighting capability —Joint DOTMLPF-by the year 2020. As the vision of Full Spectrum Dominance and the pillars of JV 2020 are being articulated into a joint operational concept, EBO and RDO will have a direct impact on how the Marine Corps will operate in the future as part of an integrated Joint/ Interagency/Multinational Task Force.

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<sup>86</sup> Ibid 57

<sup>87</sup> Lopez, M. (January 2001). (Interview with Mr. Dody Kuntz, Director Current Operations, Joint Warfighting Analysis Center, Dulgren, Virginia)

"The focus of the maneuver warfare philosophy on the identification and achievement of specific desired effects is consistent with the Joint concept of effects-based operations. Dynamic collaborative analysis of an adversary is used to identify vulnerabilities in the systems that provide their basis of power and cohesion. Operations that focus specific effects drawn from the full spectrum of national capabilities on the identified vulnerabilities will produce the synergy of effects necessary to change an adversary's behavior and provide a conclusion favorable to U.S. interests."

BGEN John Goodman      WDID MCCDC

To maintain our relevance to future CinCs, the Marine Corps must participate in the development of future joint operational concepts. The strengths of the MAGTF, being forward-deployed, and our expeditionary nature makes the Marine Corps an ideal enabling force for joint operations. EMW is the convergence of current Marine Corps concepts into a capstone concept that will provide a critical bridge to emerging joint operational concepts and the enabling role the Marine Corps will play in future operations.<sup>88</sup>

## **CONCLUSIONS**

Today we face a challenge that is unprecedented in the nations history: the need to transform our armed forces into a very different kind of military force from that which exists today, while sustaining the military's ability to play a very active role in supporting U.S. near-term efforts to preserve global stability within a national security strategy of engagement and enlargement.<sup>89</sup> In transforming, the armed forces must develop future warfighting capabilities that give the NCA the greatest flexibility in such an uncertain future. A joint operational concept based on the intent of the GNA and the vision of Full Spectrum Dominance as set forth in JV 2020 must drive DOTMLPF development and decision-making toward a cohesive joint force capability.

Responsible for joint doctrine, experimentation, and concept development, USJFC is DOD's lead agent for taking small "c" concepts and merging them into an operational concept. Changes

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<sup>88</sup> United States Marine Corps, Expeditionary Maneuver Warfare (Marine Corps Combat Development Command, Quantico, Virginia) Draft 14

in technology, the political environment, and the security environments will drive our future operational concepts.

The Future Joint Force Concept, the Joint Strike Force Concept, and the USJFC RDO Initiatives are all concepts that have participated in the defining and development of the operational concepts EBO and RDO. It is still to be decided whether EBO will be the overarching joint operational concept with RDO being a lesser-included concept. Whatever the outcome, the lessons learned from these initiatives will enhance joint DOTMLPF development and the joint combat development process.

As EMW continues to evolve it should remain focused on the Marine Corps' role in enabling joint operations. "The Marine Corps is a perfect example of a joint force. Ashore we fight shoulder to shoulder with the Army; we control the skies with the Navy and Air Force; and we come from the Sea."<sup>90</sup> The Marine Corps should partner with USJFCOM and seek a lead role in the development of future joint operational concepts.

As military professionals, the question we should be asking is not what capability an integration of today's forces can bring to tomorrow's battlefield, but what capabilities do we need for tomorrow's battlefield? According to Admiral Bill Owen, "Such a force would be radically different from the current U.S. military in its most basic structure and operating characteristics. It would be a military force designed to exploit our lead in computer, sensing, and communications technology in the hands of superbly trained American military personnel. It

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<sup>89</sup>Andrew Krepinovich, "Emerging Threats, Revolutionary Capabilities and Military Transformation" (Testimony before the Senate Armed Services Subcommittee on Emerging Threat, Washington D.C., March 5, 1999).

<sup>90</sup>James L. Jones, "CMC Congressional Testimony for FY2001 Readiness Hearings," (Washington D.C. 2001)

would be a force capable of achieving dominant battlespace knowledge and using it not only for general war but for maintaining peace."<sup>91</sup>

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<sup>91</sup>Admiral Bill Owens, Lifting The Fog Of War, (New York, Farrar, Strauss, and Giroux, 2000)

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